Application/Control Number: 09/782,153

Art Unit: 2600

## CLMPTO 08/30/04 JW

## Amend Claims 1,5,

(Currently Amended) A time synchronization system
complising:

• GPS (Global Positioning Bystom) receiver for receiving a time signal from • Global Positioning Bystom (GPS), and outputting a UTC (Universal Time Coordinated) synchronization reference pulse signal synchronizing with UTC and a UTC synchronization absolute time signal composed of a serial eignal representing an absolute time; and

a first eignal distributor for generating a reference time signal by synthesizing the UTC synchronization reference eignal and the UTC synchronization absolute time signal, and transmits that the reference time signal in electrostics to a plurelity of distributed control offented terminal devises.

wherein said time singual distributor synchronizes a daing adde of the UTC synchronization reference singual with UTC, and transmise the time synchronization singuity beach of said terminal devices in a fixed paried.

## 2. (Canoclad).

3. [Original] A time synchronization system according to claim 1, wherein said terminal device includes a reference clock operating in synchronization with the rising edge of the UTC synchronization reference signal, for generating a time signal representing a time on the finar order than a minimum time until that is proceeded in the UTC synchronization absolute time signal, and internal alook correction repeats for dempeting an internal time value based on said reference block with an external time value synchronizing with the UTC synchronization reference signal, and correcting said reference clock so that

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the time of said reference clock synchronizes with the UTC synchronization reference signal.

- 4. (Original) A time symptomization system scacerding to date 3, wherein said internal clock correction manual includes means for changing a unit delimiting width of the correction, corresponding to a magnitude of a time difference.
- E. [Cumandy Amendad] A time synchronization eyachronizing system asserting to claim 1, generalization

e GPG (Global Pasitioning System) receives for receiving a time state state in from a Grobal Pasitioning System (GPG), and outputting a UTC [Universal Time Specificated) symphymication reterance pulse eigned symphymicing with UTC and a UTC symphymication ebeciuse time eignal nombooled of a sarial skind representing an elegator time; and

a time signal distributor for aggregating a reference time signal by everthesising the UTC symptomisation reference along and the UTC symptomisation reference along and the UTC symptomisation absolute time signal, and transmitting the reference time signal in distribution to a givenity of distributed control oriented terminal devices.

wherein it impossible of receiving the UTC synchronization time signals from an internal reference signal generator for generating an internal reference signal synchronization reference signal synchronization with the UTC synchronization reference signal, an internal absolute time signal special for generator for generating an internal absolute time signal equal to the UTC synchronization absolute time signal and the QE'S resolver, said signal synthesizing unit of said time signal distributor generates an internal time signal by synthesizing the internal reference signal and the internal absolute time signal, and transmits this internal time signal as a substitute for the reference time signal in distribution to said respective terminal devices.

- 6. (Original) A time symbhomicing system according to staim 5, wherein each time eignal distributor, it impossible of reasiving the time eignal from said GPB resolver, synthesises the internal time eignal on that the internal enference signal and the internal should lime signal are not evenlapped in time.
- 7. [Original) A time synchronizing system appointing to cleim to wherein each of said terminal devices includes an internal clock and, if unable to receive the reterance time signal from said time signal distributor, continues a time signal process by use of said internal clock.